

## ABSTRACT OF THE DISCLOSURE

The invention relates to a cosmetic treatment process for improving the epidermal barrier function of the skin, scalp and mucous membrane, characterized in that a preparation containing at least one substance which

5 modulates tight junctions and/or which modulates occludin and/or claudins and/or which modulates the Zona occludens through the proteins ZO-1, ZO-2 and/or ZO-3 is topically applied. The present invention also relates to the use of a substance which modulates tight junctions and/or which modulates occludin and/or claudins and/or which modulates the Zona occludens through the proteins ZO-1, ZO-2 and/or

10 ZO-3 for the production of cosmetic preparations for improving the epidermal barrier function of the skin, scalp and mucous membrane, to the use of this substance for the production of cosmetic preparations for protection against aging of the skin and to the use of the substance for the production of cosmetic preparations for protection against the harmful effects of environmental toxins and UV radiation.